



FLAT ROOF PODIUM DECKS AND BALCONY WATERPROOFING SYSTEM

TECHNICAL DATASHEET



SYSTEM COMPONENTS

- 01 HYDRADEK PU
- 02 HYDRADEK PRIMER
- 03 HYDRADEK TOP COAT
- 04 HYDRADEK THICKENER
- 05 HYDRADEK FLEECE

WYKAMOL PROVIDING A SOLUTION TO EVERY PROBLEM

HYDRADEK

ROOF AND BALCONY
WATERPROOFING SYSTEM

COLOUR
GREY

HYDRADEK PU

01

HYDRADEK PU

SINGLE COMPONENT LIQUID MADE UP FROM PURE POLYURETHANE

HYDRADEK PU is a single component liquid made up from pure polyurethane, which once catalysed forms a continuous elastic membrane, without any joints/overlapping, and on smaller roofs without any integrated **HYDRADEK FLEECE** required.

Its properties make it an excellent choice for achieving air-tightness and perfect waterproofing on a multitude of surfaces and substrates. It is applied manually, using a roller or brush and, exceptionally, using specific spray equipment. It has CE marking on the basis of a statement made, Declaration of Performance (DoP) conforms to the regulations UE305/2011. This declaration is available on demand. **HYDRADEK PU** has a European technical approval ETA 10/0121 and BBA 16/5340 (W3: working life 25 years, 1,2mm minimum thickness).

GENERAL FEATURES

HYDRADEK PU is a highly elastic and wear-resistant membrane that, once applied, offers great stability, durability and waterproofing certified (see ETA 10/0121 and BBA 16/5340). Thanks to its versatility **HYDRADEK PU** adapts to any surface, making it the ideal product for application on uneven surfaces and in areas of any shape. Normally no surface reinforcement is required, unless on large concrete areas.

The **HYDRADEK PU** polyurethane membrane system should be applied in dry conditions avoiding the presence of humidity or water coming from the surface to be coated or the substrate, whether at the time of application or subsequently (possible inherent water pressure issues). If there is humidity or moisture in the substrate at the time of application, check the technical specifications of our primer where the maximum support humidity ranges are specified.

The **HYDRADEK PU** system requires solar radiation protection (UV rays), so, in the absence of other physical protection elements, we recommended the application of our **HYDRADEK TOPCOAT**.

The **HYDRADEK PU** system's properties enable it to bond to any surface, such as cement, concrete, polyurethane foam, butyl and bituminous sheets, wood, polyurethane plates, metal, etc. Due to its resistance, it can be walked on and it will accept a rough finish to make it anti-slip. (using **SILICA SAND**).

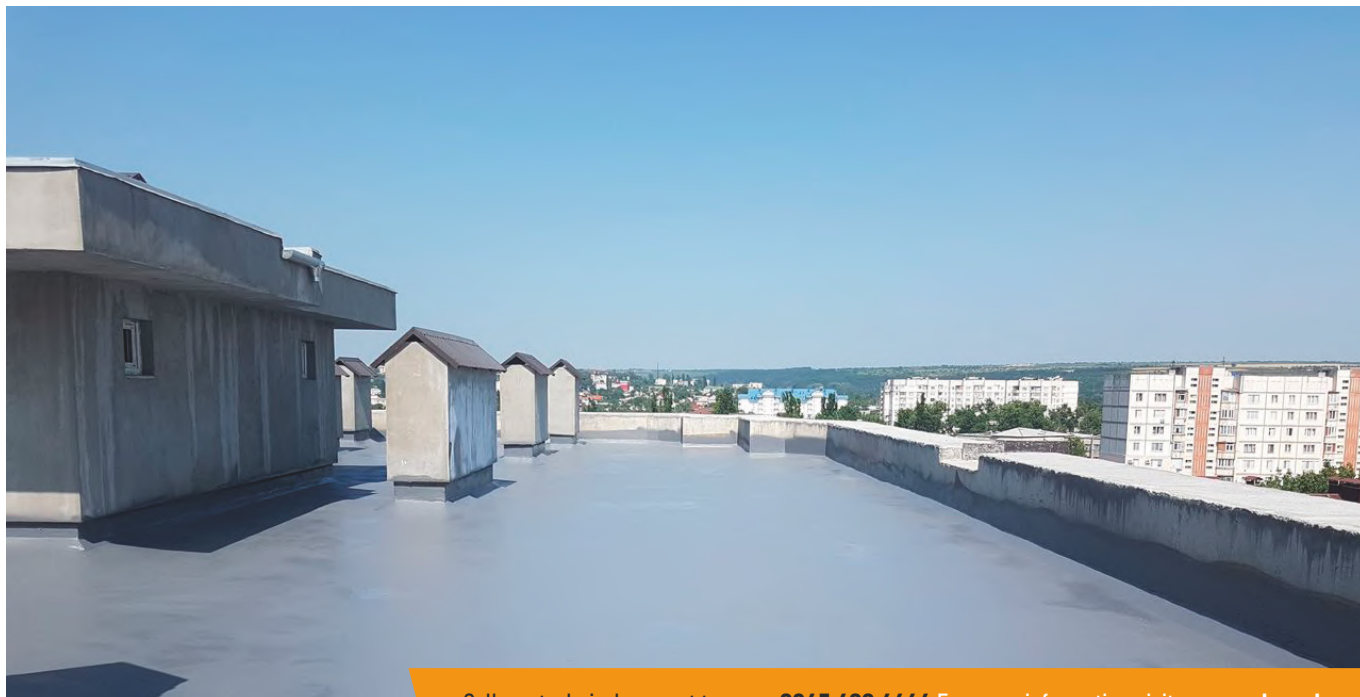
HYDRADEK PU is immune to temperature changes of between -40°C and +80°C, conserving its elastic properties. The **HYDRADEK PU** polyurethane membrane is a self-levelling membrane that requires additives for its application on vertical and sloped surfaces of more than 1,5% of a gradient, in such situations mix **HYDRADEK THICKENER** to a maximum ratio of 1litre for each 25 kg of **HYDRADEK PU**.

Ceramic flooring can be placed on top. In this case, we recommended to spread a well-distributed load of **SILICA SAND** to improve the mechanical anchorage in the last layer of **HYDRADEK PU**, or if it has already catalysed, spreading a layer of 50 to 60 g/m² of **HYDRADEK PRIMER** to anchor the **SILICA SAND**.

USES

Liquid membrane waterproofing system, to waterproofing or coating:

- Roofs, terraces, balconies, and overhangs (walkable) (ETE 10/0121 y BBA 16/5340)
- Structural concrete slabs, and concrete walls and foundations
- Metal and asbestos roofs
- Swimming pools, artificial lakes and ponds
- Green roof and walls (ETE 10/0121 y BBA 16/5340)
- Please consult our technical department in the event of any other materials/surface coverings.



Call our technical support team on **0845 400 6666** For more information visit www.wykamol.com

SURFACE PREPARATION

In general, you should take into account the following factors: Surface repair (fill the cracks and fissures, remove old existing waterproofing paints etc).

Remove dust, oils and grease, and existing chippings.

The application surface must be firm/strong and dry.

Ensure there is no inherent moisture or humidity in the existing covering, or from any preparatory fillers used.

Concrete substrate

Concrete should be completely cured (concrete curing takes 28 days) or, in any case, the maximum level of humidity allowed for the substrate should be verified prior to using the **HYDRADEK PRIMER**.

Any concrete latencies or release agents should be eliminated and an open pore surface achieved by grit blasting, milling or sanding, any cracks and damaged areas must be repaired using **HYDRADEK PROFLEX**

Existing Joints or Seals

Remove the old material, clean up and use **HYDRADEK PROFLEX TAPE** and **HYDRADEK PROFLEX ADHESIVE**.

THICKNESS AND RECOMMENDED YIELD

Recommended thickness is up to 1,4 mm, so the yield will be up to 2 kg/m² applied on ONE or various coats, depending on the application method and application conditions.

PACKAGING

Metal tins 25 kg

SHELF LIFE

12 months at temperatures between 5°C and 35°C, provided it is stored in a dry place. Once the tin has been opened, the product must be used immediately.

HYDRADEK PU COMPLEMENTING PRODUCTS:

HYDRADEK PRIMER, HYDRADEK THICKENER, HYDRADEK TOPCOAT, HYDRADEK FLEECE, HYDRADEK PROFLEX TAPE & ADHESIVE.



COLOUR
TRANSLUCENT

HYDRADEK PRIMER

02

HYDRADEK PRIMER



A SINGLE COMPONENT, LOW VISCOSITY, HIGH SOLIDS CONTENT, POLYURETHANE RESIN

HYDRADEK PRIMER has been specifically designed to increase bonding and improve the surface levelling of substrates such as concrete, mortar, or plywood prior to the application of the **HYDRADEK PU**

GENERAL FEATURES

Single component polyurethane-based resin. It requires a flat, clean, dry and hard surface. Depending on the evenness of the application surface, the coverage can vary between 100~200 g/m², in one or several thin layers. (do not apply in thick coats). The **HYDRADEK PRIMER** must be completely dry before applying **HYDRADEK PU**.

APPLICATION METHOD

- It can be applied with a roller, brush or airless spray equipment
- It can be applied on surfaces with a maximum surface humidity of 5%.
- Do not apply to surfaces that are damp or exuding water from the interior of the substrate (water pressure, leaks, etc.).
- It can be applied in combination with mineral particles (silica sand) on very uneven surfaces.
- The surface must be clean and dry. If necessary, use a pressure water to remove any oil or grease residue, efflorescence, or other contaminants, as well as loose cement etc.

In some cases, it will be necessary to use mechanical equipment to prepare the surface, as well as chemicals to clean metal surfaces.

Any cleaners used must have totally evaporated prior to continuing.

PROPERTIES

Density at 23 °C ISO 1675	1,11 g/cm ³
Viscosity at 23 °C ISO 2555	±120 cps
Solids content ISO 1768	>80%
VOC (volatile organic compounds)	270 g/l
Adhesion to concrete >	2 MPa
Drying time at 23 °C	±60 minutes
Final dry time at 23 °C	2~3 hours
Recoat range time at 23 °C	3~24 hours
Environmental application range temperature	5~35 °C
Max. Moisture on the support	5%

The above values are only a guide and can vary upon site conditions and methodology.

PACKAGING

Metal tins of 5 kg

SHELF LIFE

12 months for each product at temperatures between 5° C and 35° C, provided it is stored in a dry place. Once the tin has been opened, the product must be used immediately.

NOTE: Please call our technical department on **0845 400 6666** about the application to other substrates.

COLOUR
TRANSPARENT

HYDRADEK TOPCOAT

03

HYDRADEK TOPCOAT

A DUAL COMPONENT, LOW VISCOSITY, HIGH SOLIDS CONTENT, POLYURETHANE RESIN

HYDRADEK TOPCOAT is a two component polyurethane resin that provides a hard and durable surface for high traffic zones, as well as offering UV radiation protection on exposed (non covered/shielded) surfaces.

It is applied over the cured surface of the **HYDRADEK PU**, and offers high resistance to surface abrasion, as well as UV protection. Terraces & balconies are typical areas of use. It is easy to clean, and is resistant to mould and algae growth, as well as offering resistance in chlorinated areas. It can be applied by brush/roller, and in extreme conditions by airless spray equipment. Silica Sand can be applied to create an anti-slip surface.

GENERAL FEATURES

It is a glossy and translucent two component polyurethane resin, and can be coloured using pigments. Please ask our technical team for further details.

HYDRADEK TOPCOAT should be applied in dry conditions avoiding the presence of humidity or water coming from the surface to be coated or the substrate, whether at the time of application or subsequently due to possible inherent water pressure issues. In the event of possible exposure to moisture/water pressure issues it may be necessary to use the **HYDRADEK PRIMER**. Please consult our technical department.

Surfaces must be dry, clean, sound and fault free prior to application. The two constituent components must be mixed together 100%. Mix both components together well using a rod stirrer for around 2 minutes, or until the two components are completely mixed. **HYDRADEK TOPCOAT** must be applied in thin layers with a roller or brush. For possible airless spray application please consult our technical department. Do not apply on swimming pools or on surfaces that undergo total water immersion. **HYDRADEK TOPCOAT** can be applied to a variety of surfaces, concrete, cement, ceramics etc. If in doubt, please consult our technical department. Apply on dry, firm substrates, with a surface temperature of between 3 °C above dew point, an ambient temperature of at least 10 °C and relative humidity below 80%. It has a CE mark if it is used on the waterproofing system **HYDRADEK PU** under European guide ETAG #005.

COLOURS

The product comes in transparent neutral. For details on possible pigmentation please consult our technical department. The coverage of **HYDRADEK TOPCOAT** varies depending on the layers applied and the type of substrate. If it is applied in thin layers, consumption is approximately 150 g/m²/layer, with a total consumption of 300 g/m².

PROPERTIES

Density at 23 °C	±1,30 g/cm ³
% solids in weight	±50%
Pot life at 23 °C	> 1 hour
Adherence to concrete at 23 °C	>1,5 MPa (N/mm ²)
Support temperature range	8 °C~30 °C
Environmental temperature range	8 °C~ 35 °C
Repaint time at 23 °C and 60% relative humidity	4~24 hours
Max. relative environmental humidity	80%
Tack free time at 23 °C and 60% relative humidity	±2 hours
Transit ability at 23 °C	±24 hours
Application method	Brush, roll or spray

PACKAGING & SHELF LIFE

4.3 Litre resin (within a 5 litre size can) 0.7 Litre hardener 100% Mix together.

Component A expires after 24 months, component B expires after 12 months, at temperatures between 5° C and 25°, provided it is stored in a dry place. Once the tin has been opened, it must be used immediately.

COLOUR
YELLOWISH

HYDRADEK THICKENER

04

HYDRADEK THICKENER

LIQUID ADDITIVE FOR THE HYDRADEK PU SYSTEM

HYDRADEK THICKENER has been specially developed as a liquid additive for the **HYDRADEK PU**, to use on vertical or sloped surfaces, giving increased thixotropic anti slump properties during the drying/curing process.

APPLICATION METHOD

Add **HYDRADEK THICKENER** in the proportion needed (maximum 1 litre per 25 kg of **HYDRADEK PU**) into the drum of the liquid **HYDRADEK PU**. The ultimate ratio will depend upon the size/height of upstand, or angle of slope. However, it is not to be mixed/used if the ambient temperature is below 5c

PACKAGING & SHELF LIFE

Metal tins of 1Ltr, 12 months at temperatures between 5° C and 35° C, provided it is stored in a dry place

PROPERTIES

Density at 23 °C ISO 1675	±0,9 g/cm ³
Solids content ISO 1768	±26%
Colour	yellowish
Viscosity at 23 °C ISO 2555	20-50 cps

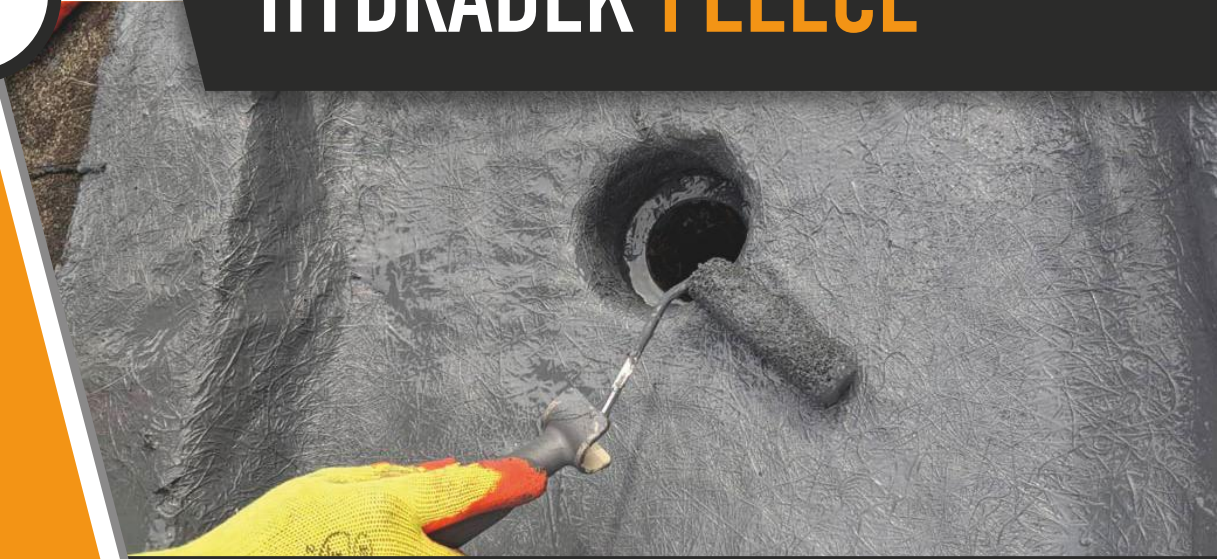


COLOUR
WHITE

HYDRADEK FLEECE

05

HYDRADEK FLEECE



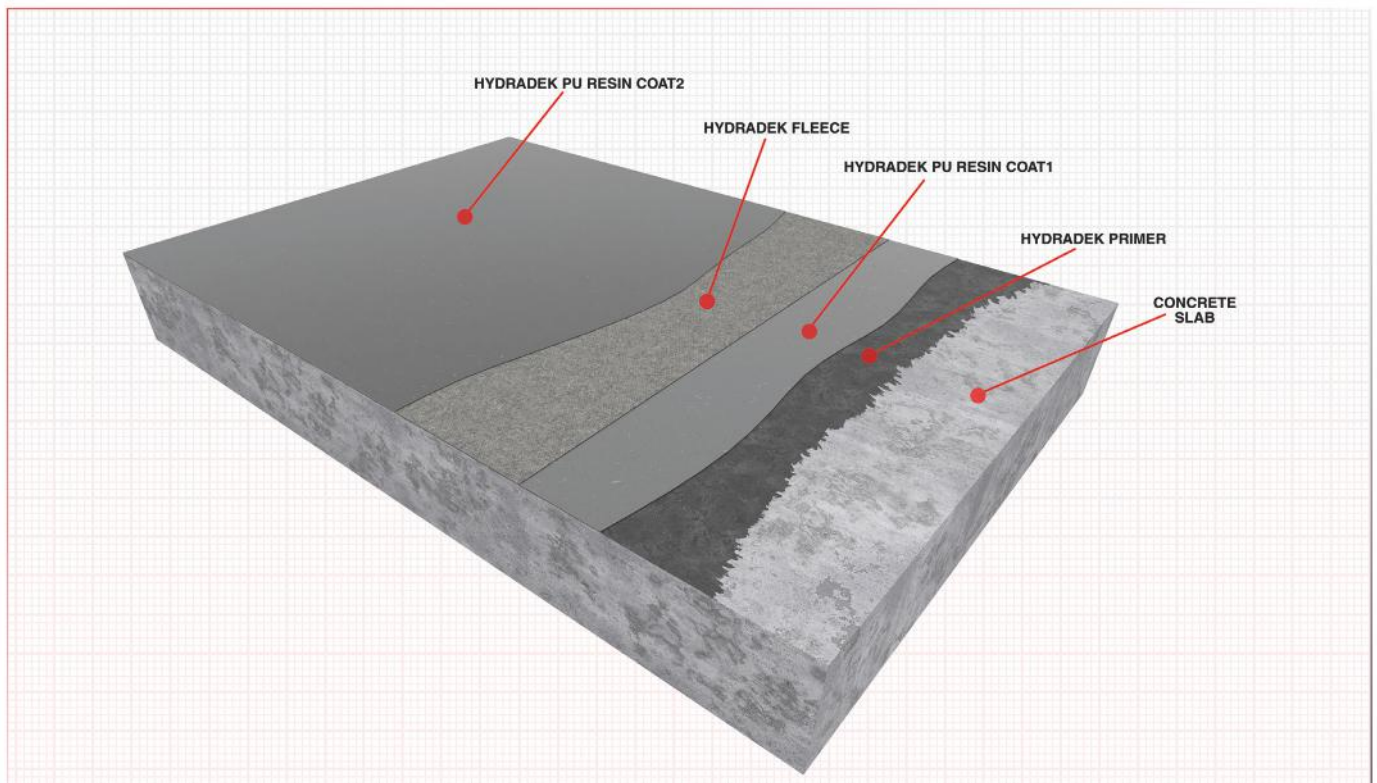
A SINGLE COMPONENT, LOW VISCOSITY, HIGH SOLIDS CONTENT, POLYURETHANE RESIN

HYDRADEK FLEECE is a spun glass fibre, for use with **HYDRADEK PU** in large roofing/flat surface applications where it is necessary to achieve an homogeneous bond/seal.

Supplied in clear white 20m x 1m wide wide roll form, it is lightweight (100gm m²), and achieves an elastomeric finish with substantially increased surface strength/integrity. After the initial application of **HYDRADEK PU**, the fleece is immediately laid and pressed into the surface by roller, followed by

another application of **HYDRADEK PU** over the top thus achieving a uniform integral homogenous finish. It is highly recommended to application on most large surfaces, in particular concrete.

HYDRADEK SYSTEM



FLAT ROOF PODIUM DECKS AND BALCONY WATERPROOFING SYSTEM



TECHNICAL SUPPORT TEAM

0845 400 6666

HYRADEK SYSTEM forms part of our comprehensive waterproofing solutions offering, and is constantly being updated with new products.

Please ask for further details

The information in this technical data-sheet is given in good faith and was correct at the time of publication, but does not purport to be all inclusive. We reserve the right to update this information at any time without prior notice. All data is obtained through extensive testing in stringent laboratory conditions, however as we have no control over site conditions or work executed we accept no liability for incidental and/or consequential property damage arising out of the use of this product. The Wykamol Group's standard terms and conditions of sale apply.